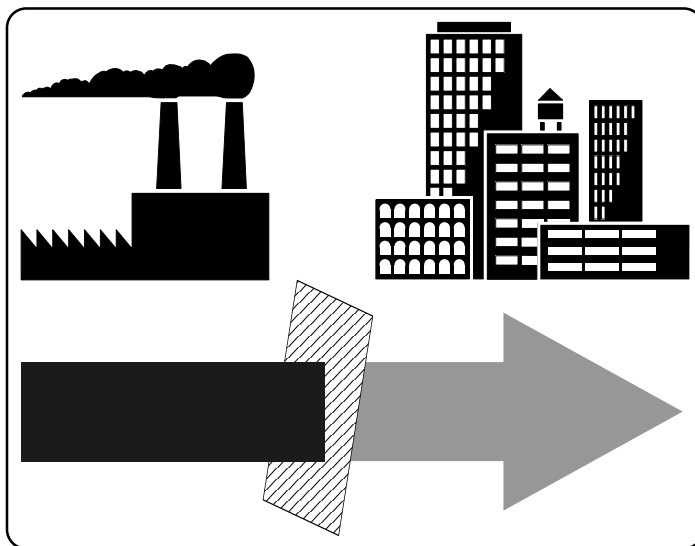


BUREAU OF WATER

Municipal Pretreatment Programs

A guide to DHEC's program approval process



October 1997



South Carolina Department of Health
and Environmental Control

Preface

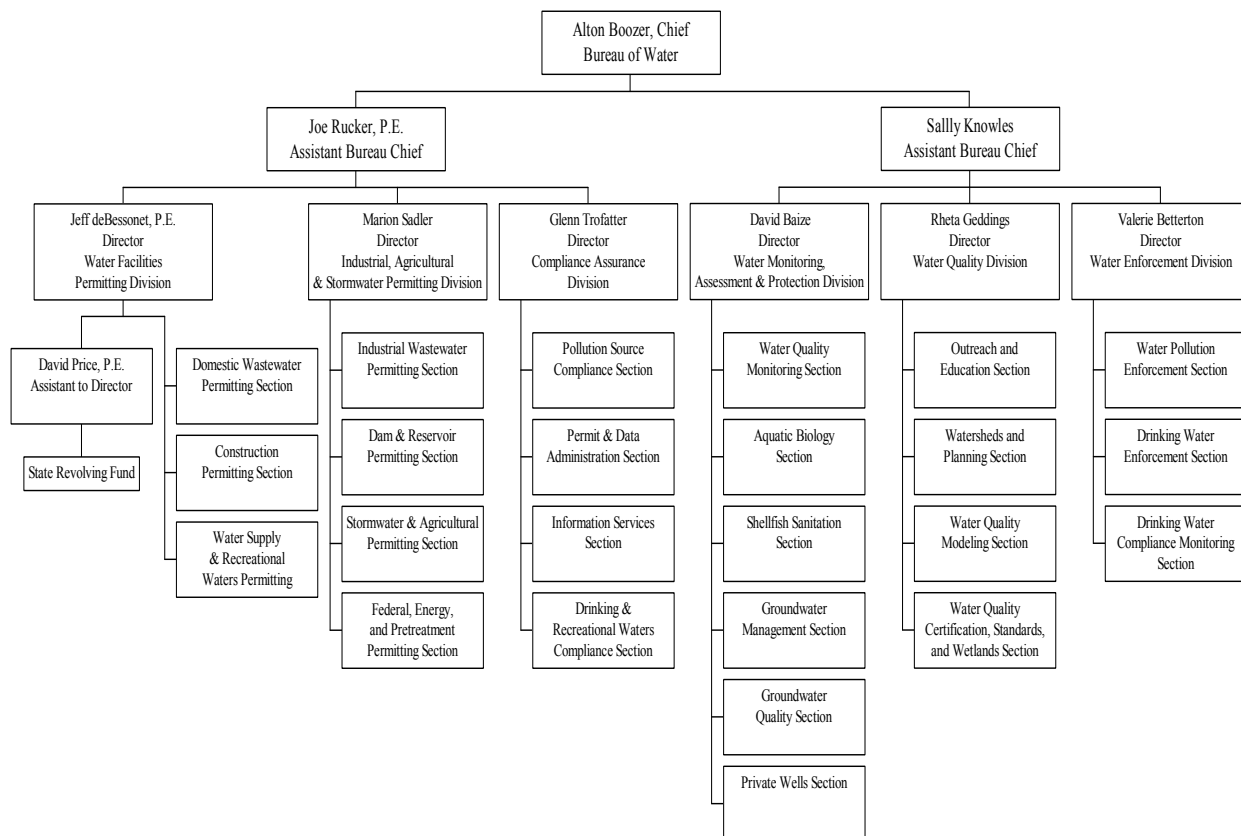
This document has been prepared for use by consulting engineers, developers, industries, and public entities dealing with the Bureau of Water on pretreatment program issues. It provides:

- ☞ An overview of the Bureau's responsibilities
- ☞ A summary of regulatory requirements
- ☞ Identification of the entities involved in permitting, and
- ☞ Highlights of the review and approval procedures

We hope this document will help everyone have a better understanding of the pretreatment program. Through this understanding, we feel it will be easier to go through the administrative processes, technical reviews, and approval processes of the Bureau.

This document provides an explanation of the Bureau's decision making processes. Our decisions are made based on the technical, administrative, and legal aspects of a pretreatment program with the protection of the environment and public health as the major considerations.

The Bureau is committed to providing quality service in a reasonable time in all aspects of the permit programs. To do this, we need the cooperation of all parties who deal with us in recognizing our responsibilities and the manner in which we implement them. Therefore, please take the time to read this document carefully. This document is not a replacement for the regulations on pretreatment programs. If you have any questions, please let us know. We welcome any comments you may have on this document or suggestions on how we can improve our service to you and the public.



Why?



Why is DHEC approval needed for pretreatment programs?



It is required by federal law/regulations. DHEC's review insures that municipalities adequately protect their treatment system and the receiving waters.

The Clean Water Act of 1977 (Public Law 95-217, a revision to the Federal Law) and the Federal Pretreatment Regulations for Existing and New Sources of Pollution (40 Code of Federal Register, Part 403) contain requirements for the development and implementation of pretreatment programs for publicly owned treatment works (POTWs). A manual entitled "South Carolina Procedures Manual for Preparing a POTW Pretreatment Program" has been written by the Bureau. The manual gives specific guidance for the development of pretreatment programs in SC. Therefore, please see that manual for more information on pretreatment programs.

Beyond the details of legal requirements, pretreatment programs help insure the protection of receiving waters for municipal discharges by controlling certain pollutants at the source of generation (i.e., the industrial user). Some pollutants generated by industries will pass through a municipal wastewater treatment system, impacting the receiving stream. Some pollutants may interfere with the biological operation of the treatment facility, resulting in violation of effluent limits. Since most municipal wastewater treatment systems are not designed to handle high strength wastewater (e.g., high BOD₅) and toxic pollutants (e.g., metals), the pretreatment program compensates for this limitation.

Where?



Where do I apply for a permit?



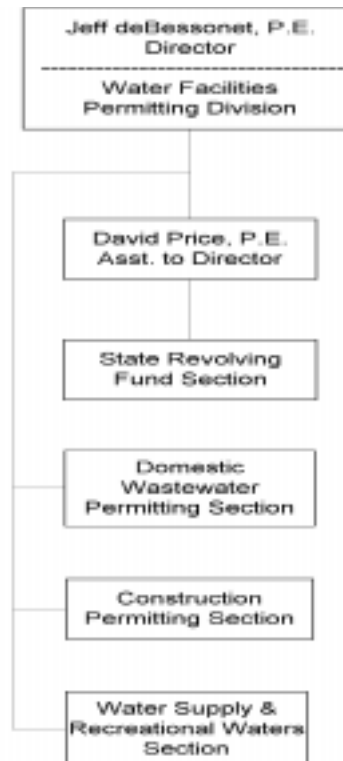
*DHEC's Bureau of Water is responsible for pretreatment program approvals:
2600 Bull Street, Columbia, SC 29201*

The Bureau of Water (Bureau) is under the Office of Environmental Quality Control (EQC) of the Department of Health and Environmental Control (DHEC). The Bureau is responsible for protecting the quality of the state's surface and ground water and ensuring safe drinking water for the public. To meet this responsibility, the Bureau issues permits, approvals, and certifications for a variety of wastewater and drinking water projects. This booklet explains the permitting procedures of the Bureau for pretreatment programs.

WATER FACILITIES PERMITTING DIVISION

The Water Facilities Permitting Division handles pretreatment program approvals. Submittals should be made to the *Domestic Wastewater Permitting Section* of the Division.

In conjunction with the review of NPDES permits, the Domestic Wastewater Permitting Section reviews submittals for compliance with state and federal regulations. When a program approval is warranted, whether it be for a new program or for a modification to an existing program, the approval is effected through a modification to the NPDES permit. This process has a formal public notice component prior to issuance of the permit.



How?



How do I apply for an approval?



An approval request ultimately comes as a modification to the NPDES permit to either establish a program or modify an existing program.

The development of a pretreatment program normally has two phases:

- ☞ Phase 1: Performing Waste Surveys
- ☞ Phase 2: Effecting Legal Authority

To develop a pretreatment program, a survey listing all industrial users is first compiled by the permittee. This survey is called the Non-Domestic Waste Survey. This is Phase 1A of the pretreatment program. Next, the permittee must demonstrate the legal authority and ability to carry out a pretreatment program. This is Phase 1B of the pretreatment program.

The pretreatment program also consists of an analysis of the wastewater treatment plant's (WWTP) capability to treat industrial wastewater and the issuance of pretreatment permits by the WWTP's owner to industries connecting to the WWTP. The analysis is called a "Headworks Analysis" and it is part of Phase 2 of the program.

A headworks analysis consists of an evaluation of the WWTP's capability to treat wastewater containing pollutants that will or may affect the WWTP's performance if they are present in sufficient amounts. For pollutants of concern, this analysis will establish the monthly average and daily maximum values in mass and concentration that cannot be exceeded for the facility to operate properly. After Phase 1A and Phase 1B have been completed and approved, the pretreatment entity will prepare the headworks analysis and submit it to the Bureau for approval.

The owner of the WWTP will keep an inventory of the permitted levels of the pollutants and monitor the pollutants in the influent and effluent of the WWTP. Pretreatment permits for industries will be issued, modified, or denied issuance by the owner of the WWTP based on the approved headworks analysis and the monitoring results.

There are public notice requirements for this project category. This type of project should be submitted at least two hundred seventy (270)

days before the date an approval will be needed. The actual time may be shorter or longer. This will depend upon the complexity of the program and the workload of the Bureau when the program is submitted.

To avoid confusion between the pretreatment program phases as given in the pretreatment manual of the Bureau and the phases of the different categories of projects as given in this document, the phases as normally listed in this document will be omitted in the following paragraphs.

NEW PRETREATMENT PROGRAM

a. Submittal Package

The submittal of a new pretreatment program consists of two submittal phases. A complete administrative package must be submitted for each phase. The initial submittal package must include the following:

1. A transmittal letter outlining the submittal package.
2. One (1) copy of the Non-domestic Waste Survey.
3. One (1) copy of the existing or the proposed sewer use ordinance.

The submittal package must be sent to the Manager of the Domestic Wastewater Permitting Section. An incomplete submittal will be returned. Please ensure the submittal package contains each listed item.

b. Processing

Upon receipt of the submittal, the project will be assigned to a member of the Domestic Wastewater Permitting Section. An acknowledgement letter will be sent to the consulting engineer for the project. This letter will contain the name and telephone number of the project manager and an estimated review time.

When the above information is approved, the pretreatment entity must submit the following information to the Domestic Wastewater Permitting Section:

1. A transmittal letter outlining the submittal package.
2. One (1) copy of the headworks analysis.
3. One (1) copy of the documents demonstrating the pretreatment entity's legal authority to implement the pretreatment program.

PRETREATMENT PROGRAM REVISION

a. Submittal Package

For revisions to an existing Pretreatment Program, the submittal package must include the following:

1. A transmittal letter outlining the submittal package.
2. One (1) copy of the revised headworks analysis. The headworks analysis must be recalculated to incorporate any changes in stream limits, removal rates, POTW design capacity, average seven day low flow that occurs once every ten years (7Q10 flow), etc. This includes evaluation of the need for local limits as defined under 40 CFR Part 403.5(c) and (d). The headworks analysis must consider the water classification and standards for the permittee's receiving stream to the satisfaction of the Bureau.
3. One (1) copy of the reevaluation of the industrial allocation of pollutants.
4. One (1) copy of the latest version of the sewer use ordinance; with proposed revisions to comply with the latest pretreatment regulations (40 CFR Part 403) and a legal opinion as required under Phase IB of a pretreatment program.
5. One (1) copy of each new pretreatment questionnaire for all regulated industrial users.
6. One (1) copy of an updated Phase IA listing that includes industries that tied onto the POTW during the previous five years.
7. One (1) copy of each draft revised industrial permit.
8. One (1) copy of a comprehensive list showing what industries discharge to the POTW and the category each falls under, if any.
9. One (1) copy of an Enforcement Response Plan for approval according to 40 CFR 403.8(f)(5).
10. Any other information necessary for the permittee to demonstrate to the Bureau's satisfaction that the update to the overall pretreatment program complies with the latest EPA regulations, 40 CFR Parts 122 and 403, Federal Register Volume, No. 142 dated Tuesday, July 24, 1990.
11. The Bureau may require the permittee to submit additional testing, information, calculations, and/or reports that would be appropriate to document compliance with item 10 above prior to the approval of revisions to the pretreatment program.

The submittal package should be sent to the Manager of the Domestic Wastewater Permitting Section. An incomplete submittal will be returned. Therefore, please insure the submittal package includes each item listed.

b. Processing

Upon receipt of the submittal, the project will be assigned to a member of the Domestic Wastewater Permitting Section. An acknowledgement letter will be sent to the consulting engineer for the project. This letter will contain the name and telephone number of the project manager and an estimated review time.

PROGRAM APPROVALS

When the pretreatment program meets all applicable requirements, the Bureau will write a letter of preliminary approval. This approval will be subject to the public notice requirements. The pretreatment entity then will submit three (3) complete copies of the pretreatment program (bound and ready for public notice)

Upon receipt of the above information, the Bureau will issue a public notice on the submittal of a Local Pretreatment Program. This public notice will provide for a thirty (30) day comment period. Also, the Bureau will send a copy of the pretreatment program to both the appropriate District Office of EQC and the pretreatment entity. Therefore, the pretreatment program will be locally available for public review during the public notice process.

If no comments are received, the copies of the pretreatment program will be returned to the Bureau. The Bureau will then write a letter of final approval on the pretreatment program. A public notice of approval of a local pretreatment program will then be issued. This notice will also identify that the permittee's NPDES permit will be modified to incorporate the approved pretreatment program. This is similar to the notice of final determination for an effluent disposal permit.

If sufficient comments are received, a public hearing may be held. The final decision by the Bureau staff on the approval of the program will be made after the public hearing.

Generally, the procedures for public notices of a local program, public hearings, final approval public notices, and appeals on pretreatment programs will be the same as the procedures on the issuance of effluent disposal permits.